Family Labracoglossidae

Body elongately ovoid, well compressed, ~~Head small, compressed.~~ especially the chest and abdomen sometimes formed as a sharp keel. Head small, compressed. Snout moderate or short. Eye advanced, large to small, high. Mouth small or moderate, lower jaw protruding in front. Maxillary not reaching eye or extending below eye. Teeth small, short, in jaws, on vomer palatines and tongue. Preopercle edge minutely serrated or entire. Scales small, usually finely ctenoid. Lateral line complete, axial on side of body. First dorsal little higher or little lower than

Pigonus corallinus (Valenciennes).

Amphacanthus corallinus Valenciennes, Hist. Nat. Poiss., vol. 10, 1835, p. ~~104~~ 139. Seychelles, Java. — Kühlegel and Müller, Verhand. Nat. Gen. Zool., 1837–44, p. 10, plate 2, fig. 2 (Batavia). — Bleeker, Nat. Tijd. Ned. Indië, deel 3, 1852, p. 740 (Macassar); l.c., deel 5, 1853, p. 319 (Amboina); l.c., deel 12, 1856, p. 230 (Batu Islands). — Bleeker, Nat. Hist. Soc. Sci. Ind.-Neerl., vol. 3, no. 4, 1857–58, p. 3 (Manado); l.c., no. 5, 1857–58, p. 2 (Macassar). — Weber, Siboga Exped., Leiden ~~60~~ 57, 1913, p. 326 (Lombok, Macassar, Gisser).

Teuthis corallina Günther, Cat. Fish. Brit. Mus., vol. 3, 1861, p. 316 (Moluccas). — Bleeker, Verslagen Akad. Wet. Amsterdam, deel 2, series 2, 1868, p. 284 (Volor). — Günther, Journ. Mus. Godeffroy, Band 2–3, Heft 5–6, 1874, p. 88 (Pelew Islands). — Meyer, Linn.

second dorsal, spines all connected by membrane. Soft dorsal longer than first dorsal, and anterior rays a little elevated. Anall like second dorsal, shorter, and preceded by 3 short spines lower than fin. Caudal forked. Paired fins short, ventral much shorter and usually well behind pectoral base.

Small fishes of the western and southern Pacific.

Analysis of Genera.

a. Labracoglossinæ, new subfamily. Soft dorsal and anal finely scaled, eye greater than snout; maxillary extends below eye. Labracoglossa.

a.' Bathystethinæ, new subfamily. Soft dorsal and anal naked, eye less than snout; maxillary not reaching below eye.

b.' Spinous dorsal little higher than soft dorsal; pectoral base in lower half of body depth; 9 or 10 rows of scales on cheek below eye. Evistius.

b.'' Spinous dorsal lower than front of soft dorsal; pectoral base in upper half of body depth; 4 rows of scales on cheek below eye. Bathystethus.

Genus Labracoglossa Peters

Labracoglossa Peters, Monatsb. Akad. Wiss. Berlin, p. 513, 1866. (Type Labracoglossa argenteiventris Peters, monotypic.)

Cypselichthys Steindachner and Döderlein, Denkschr. Akad. Wiss. Wien, Math.-naturw. Kl., vol. 48, p. 14, 1884. (Type Cypselichthys japonicus Steindachner and Döderlein, monotypic.)

Body elongate, compressed. Head small. Snout short, obtuse. Eye large, high, before middle in head. Mouth small, oblique. Maxillary extends below eye, expanded terminally. Very small teeth in jaws, on vomer and tongue, palatines and pterygoids. Preopercle edge very finely denticulate. Gill rakers 7. ~~Head~~ Branchiostegals 7. Scales ctenoid. Soft dorsal and anal finely scaled. Longest dorsal spines little longer than fin rays, spinous fin half of soft fin. Anal shorter than soft dorsal, spines 3, short. Caudal forked. Pectoral little shorter than head. Ventral moderate, inserted well behind pectoral base.

One species.

Labracoglossa argenteiventris
Peters

Labracoglossa argenteiventris Peters, Monatsb. Akad. Wiss. Berlin, p. 513, 1866 (type locality, Yokohama). — Jordan, Tanaka, Snyder, Journ. College Sci. Tokyo, vol. 33, art. 1, p. 136, 1913 (reference). — Jordan and Thompson, Mem. Carnegie Mus., vol. 6, No. 4, p. 241, Sep. 1914 (Misaki).

— Izuka and Matsuura, Cat. Zool. Spec. Tokyo Mus., Vert., p. 156, 1920 (Boshiu).

depth 4; head 4, width 2. Snout 5 in head from snout tip; eye 3 3/4, greater than snout, subequal with interorbital; maxillary reaches 1/4 in eye, expansion 2 2/5 in eye, length 3 in head from snout tip, interorbital 3 1/2, low.

Scales 75 in lateral line; 5 or 6 above, 11 below. Cheeks with 8 ~~or 9~~ rows of scales, of which 3 rows on preopercle flange. Soft dorsal and anal both densely covered with small, fine scales, also small scales at bases of dorsal spines. Caudal scaly basally.

D. ~~X~~, 26 or 27, fifth spine 2 in head, second ray 2 1/2; A. III, 23 or 24, third spine 3 4/5, = second anal ray 3; caudal

4 1/2 in rest of fish, well forked, pointed lobes equal; least depth of caudal pedencle 3 4/5; pectoral 1 1/4; ventral 2.

Blue gray above, below silvery white. Dorsals and anals dull gray brown. Caudal and paired fins tinged with yellowish or greenish. Large dark blotch at base and axil of pectoral. Length 185 mm.

(Steindachner and Döderlein.)

Japan.

Genus Evistius Gill

Evistius Gill, Mem. Nat. Acad. Sci., Washington, vol. 6, p. 123, 1893. (Type Platystethus huttonii Günther, orthotypic.)

Body elongately ovoid, well compressed. Head rather small. Snout moderate. Eye small, high, before middle in head length. Mouth small, inclined, lower jaw projecting. Maxillary not reaching eye. Scales small, extend on caudal base but not on dorsals and anals. Lateral line complete, axial along side. Spinous dorsal higher and little shorter than soft dorsal. Anal with 3 low spines in front, soft fin little shorter than soft dorsal. Caudal forked. Pectoral moderate. Ventral small, inserted well behind pectoral base.

One species.

Body oblong, compressed. Head rather small. Snout obtuse, moderate. Mouth cleft narrow, oblique. Preopercle edge entire. Teeth minute in jaws, none on palate. Branchiostegals 5 or 6. Vertebrae 25. Scales moderate, smooth, edges minutely serrated. First dorsal with 8 spines, stout. Second dorsal and anal more developed, each received in scaly sheath. Anal spines 3, no finlets. Paired fins rather short.

Evistias huttonii (Günther)

Platystethus huttonii Günther, Ann. Mag. Nat. Hist., London, ser. 4, vol. 17, p. 395, May 1, 1876 (type locality, Dunedin, New Zealand); Rep. Voy. Challenger, Zool., vol. 31, pt. 2, p. 13, pl. 2, figs. 7 (not fig. 8), 1889 (passage from Australia to the Cape of Good Hope; passage from Sydney to Wellington) ~~; lat. 34° E. long. 120° near Cape of Good Hope)~~.

Evistias huttonii Gill, Mem. Nat. Acad. Sci., Washington, vol. 6, p. 123, 1893 (reference). — McCulloch, Austral. Mus. Mem., No. 5, pt. 2, p. 179, Sep. 10, 1929 (reference).

— Waite, Rec. Canterbury Mus., vol. 1, No. 1, p. 23, April 25, 1908 (reference).

depth 2 9/10; head 3 4/5, width 2 1/10. Snout 3 1/8 in head from snout tip; eye 5, 1 3/4 in snout; maxillary reaches 3/4 to eye, expansion 2 1/5 in eye; length 3 7/8 in head from snout tip; preorbital depth equals eye; interorbital low; preopercle edge entire.

Scales 90 in lateral line. D. XIII to XV, 36, fifth spine 2 1/6 in total head length, second ray 3; A. III, 32, third spine 2 in eye, first ray 3 1/5 in total head, caudal 1 1/8, forked, ends of lobes rounded; least depth of caudal peduncle 3 1/10; pectoral 1 3/4; ventral 3 3/4.

Silvery, back above lateral line greenish. Spinous dorsal

black. Length 163 mm. (Günther.
New Zealand.

Genus Bathystethus Gill

Bathystethus Gill, Mem. Nat. Acad. Sci. Washington, vol. 6, p. 123, 1893. (Type Cichla cultrata Schneider. Virtually, as Bathystethus Gill proposed to replace Platystethus Günther.)

~~Platystethus~~ Platystethus (not Günther, Cat. Fish. Brit. Mus., vol. 2, p. 391, 1860. (Type Cichla cultrata Schneider, monotypic.)

spinous fins more or less clouded or shaded with deeper brown and all of soft vertical fins spotted with dusky, as cross bars in young, as numerous small spots with age, especially caudal. Paired fins brownish.

Mauritius, East Indies, Philippines, Melanesia. A well-marked deep-bodied species, readily known by its vermiculated coloration. The very young are certainly similar to the young of Siganus concatenatus, but usually are distinguished entirely by their color pattern. This shows at least slight traces of a vermiculated design in the present species.

Body oblong, well compressed, abdominal edge rather sharp, with lateral part of breast flat. Head moderate. Snout moderate. Eye moderate, high, median in head. Mouth well inclined, lower jaw projecting. minute teeth in jaws, none on palate. Preopercle with rounded entire edge. Branchiostegals 5 or 6. Vertebrae 24 or 25, of which 14 caudal. Scales small, smooth, edges moderately serrated. Cheeks scaly. Soft dorsal and anal reclined in low scaly sheaths. Caudal base scaly. Dorsal spines all lower than soft fin, connected by membrane. Second dorsal and anal more developed, front rays of each only moderately higher than other rays. Anal

spines 3, low, Caudal forked. Pectoral short, in upper half of body depth. Ventral small, behind pectoral base. Two species in the Pacific.

Analysis of Species

a.' Head 4 1/2; eye 4 1/2; dorsal rays 23 to 25; anal rays 28 to 30. cultratus.

a.² Head 3 4/5; eye 3 1/2; dorsal rays 27; anal rays 32. orientale.

Bathystethus cultratus (Schneider)

Cichla cultrata Schneider, Syst. Ichth. Bloch, p. 343, 1801 (type locality Norfolk Island).

Sciaena cultrata (Forster) Schneider, op. cit.

cavities; spines of head wide
developed; scales deciduous,
cycloid.

± 1, Anal spines 3. Tetarches.

± 2, Anal spines 2. Macrocorpus.

f.3 Pterodichthyinae new subfamily.
Dorsal spines 11; anal spines 2;
supraorbital filament long at
head: spines D. membranes entire Pterodichthys.
the filaments: spines D. membranes cut to Pterygotus

f. 2 Centropogoninae new subfamily.
Spinous dorsal begins over vertical
limb of preopercle. Centropogon.

f.2 Plectrogeninae new subfamily.

Seriola cultrata Richardson, Ann. Mag. Nat. Hist., London, vol. 11, p. 169, ~~1843~~ fig. (front view of head), 1843. — Bleeker, Verh. Kon. Akad. Wet., Amsterdam, vol. 2, p. 10, 1853 (Norfolk Island).

Platystethus cultratum (Günther, Cat. Fish. Brit. Mus., vol. 2, p. 391, 1860 (type; Norfolk Island). — Ogilby, Austral. Mus. Mem., no. 2, p. 61, 1889.

Bathystethus cultratus Gill, Mem. Nat. Acad. Sci., Washington, vol. 6, pp. 95, 123, 1893 (reference). — Waite, Rec. Austral. Mus., vol. 5, pt. 3, p. 161, pl. 19, fig. 2, March 11, 1904 (Norfolk Island; Lord Howe Island).

Platystethus quentheri Ogilby, Proc. Zool. Soc., London, p. 157, 1889 (type locality, Lord Howe Island).

Head 4 1/2 (Regan). Snout 1 1/2 in eye; eye 4 1/2 in head; maxillary reaches eye; interorbital more than eye, convex.

Scales 60 in lateral line; 5 above, 14 below. Scales with lateral striae parallel to edge, free portion with excessively small pickles, edge minutely serrated; hind part without striae or folds. Cheek with 4 rows of scales to preopercle ridge, flange naked. Other opercles smooth; scales

D. VIII, I, 24 (23 to 25), longest spine = 3 1/2 in head; A. III, 30 (28 to 30); pectoral = short, reaches opposite vent; ventral very short, not reaching vent. Uniform silvery. Length 200 mm. (Günther).

Norfolk Island.

Bathystethus orientale Regan

Bathystethus orientale Regan, Proc. Zool. Soc. London, p. 373, 1913 (type locality, Easter Island).

Platystethus cultratus (not Schneider) Kendall and Radcliffe, Mem. Mus. Comp. Zool., vol. 35, p. 97, pl. 2, fig. 3, 1912 (Cook Bay, Easter Island). — Fowler, Mem. Bishop Mus., vol. 10, p. 236, 1928 (Easter Island example).

p. 529 (Luzon, Batangas, Nasugbu, Cavite, Santa Cruz). — Steindachner, Sitzungsb. Akad. Wissenschaften. Gesell., Band 25, 1900, p. 425 (Ternate).

Xenthis vermiculatus Fowler, Journ. Acad. Nat. Sci. Phila., vol. 12, series 2, 1904, p. 546 (Padang).

Nigania vermiculata Evermann and Seale, Bull. Bur. Fisher., vol. 26, 1906 (1907), p. 98 (Zamboanga, Bacon, San Fabian). — Seale, and Bean, Proc. U. S. Nat. Mus., vol. 33, 1907, p. 248 (Zamboanga). — Seale, Philippine Journ. Sci., vol. 5, no. 4, 1910, p. 283 (Sandakan, Borneo). — Fowler, Copeia, no. 58, June 18, 1918, p. 64 (Philippines).

Nigania shortlandensis Seale, Occas. Pap. Bishop Mus., vol. 4, no. 1, 1906, p. 69, fig. 17. Shortland Island, Solomons.

Depth 3; head 3 4/5. Snout 3 in head from snout tip; eye 3 1/2, 1 1/8 in snout; maxillary reaches 7/8 to eye, expansion 1 2/3 in eye, length 2 1/3 in head from snout tip; interorbital low; preopercle edge entire.

Scales 53 in lateral line to caudal base and 4 more on latter; 6 above to spinous ~~anal~~ dorsal origin, 8 above to soft dorsal origin, 11 below; 3 rows on cheek below, preopercle flange naked; 7 between pectoral and ventral bases. Small scales crowded along bases of soft dorsal and anal.

D. VIII, I, 27, fifth spine 4 1/5 in total = head length, first branched ray 3; A. II, I, 32, first branched ray 3 7/8 = =; caudal

1, deeply forked, lobes slender; least depth of caudal peduncle $3\frac{3}{5}$; pectoral $1\frac{2}{5}$; ventral $2\frac{3}{4}$.

Dark slaty and brownish above, lighter on sides, silvery below. Longitudinal dusky streaks following rows of scales, those in axis of body continuing to base of caudal, successively shorter to the one on a line from about pectoral base, which one terminates under sixth dorsal ray. Each row of scales on sides of abdomen streaked with white.

Length 235 mm. (Kendall and Radcliffe.)

Easter Island.